CALATHEA CAROLINEAE (MARANTACEAE), A NEW SPECIES ENDEMIC TO HONDURAS

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ABSTRACT

Calathea carolineae H. Kenn., sp. nov., known only from two collections in Parque Nacional Cusuco, Cortes Department, Honduras, is described as new for inclusion in Flora Mesoamericana. Calathea carolineae differs from C. atropurpurea Matuda and C. matudae H. Kenn. in lacking claviculate bracteoles and the non-recurved bract margins; and differs from C. micans (L. Mathieu) Körn. by the minutely pilose adaxial leaf surface and deciduous habit.

RESUMEN

Calathea carolineae H. Kenn., sp. nov., conocida solo de dos colecciones de Parque Nacional Cusuco, Departamento de Cortés, Honduras, es descrita como nueva para su inclusión en Flora Mesoamericana. Se diferencia de C. atropurpurea Matuda y C. matudae H. Kenn. por la ausencia de bractéolas claviculadas y los márgenes de las brácteas no recurvados; y de C. micans (L. Mathieu) Körn. por el envés de la lámina diminutamente piloso y hábito deciduo.

Currently 18 species of Marantaceae are recognized for Honduras, 10 in the genus *Calathea*, including the new species described herein. The related, *C. matudae* (Kennedy & Ganders 2011: 59), had been previously identified as *C. atropurpurea*, a species now recognized as endemic to western Mexico. Thus, the total number of species has only increased by one, but that species, *C. carolineae*, is the only Marantaceae species endemic to Honduras.

TAXONOMIC TREATMENT

Calathea carolineae H. Kenn., sp. nov. (Fig. 1). Type: HONDURAS. Cortes: W of San Pedro Sula, Sierra de Merendón, Parque Nacional Cusuco, El Cortecito Camp-site, valley bottom in montane rain forest, 1305 m, Grid ref. 0361758 1716496, 17 Jul 2008, D. L. Kelly 12033 (HOLOTYPE: BM; ISOTYPE: HEH)

Haec species a Calathea atropurpurea Matuda et C. matudae H. Kenn. bracteolis claviculatis absentibus atque bracteis marginibus non recurvatis, a C. micans (L. Mathieu) Körn. foliis adaxialiter minute pilosis atque habitu deciduo distinguitur.

Plants deciduous, rhizomatous, herbs, 40–60 cm. **Leaves** 3–5, basal; leaf sheath 11–18 cm, not auriculate, pilose; petiole 1.5–14 cm, bearing a groove adaxially, pilose along groove, becoming subglabrous basally but hairs more dense just above sheath; pulvinus 0.6–1.2 cm, densely tomentose in a narrow band adaxially, the rest glabrous; leaf blade 10–21 × 4.5–9 cm, thin, herbaceous, elliptic, asymmetric, ratio of larger to smaller side of blade 1.31–1.54:1, apex obtuse with acumen, acumen to 1 cm, slightly eccentric, base obtuse, shortly abruptly attenuate, lowermost the smallest, lenght:width ratios 1.96–2.74:1, 10–15 lateral veins per 3 cm, 17–19 cross veinlets per 5 mm (veins measured at midpoint of each side of blade); adaxial surface of blade green with scattered minute hairs, each borne on a slightly raised basal cluster of cells, hairs 0.1–0.2 mm, more dense in acumen, midrib lighter green, appressed tomentose, hairs 0.3–0.5 mm; abaxial surface of blade light green, glabrous except acumen sparsely tomentose, hairs 0.3–0.5 mm, midrib light yellow-green, glabrous except tomentose along sides in basal 1–2 cm. **Inflorescence** terminal, 1 per shoot, usually borne above the leaves, 2–2.2 × 1.5–1.7 cm, imbricate, turbinate to broadly ovoid; peduncle 40–56 cm, glabrous. **Bracts** 8–10, 1.2–1.4 × ca.0.8 cm, spirally arranged, herbaceous, broadly ovate to ovate, apex acuminate attenuate in lowermost, upper ones acute, apex not recurved; abaxial surface of bracts cream basally, green apically (fide *Kelly 12033*), densely

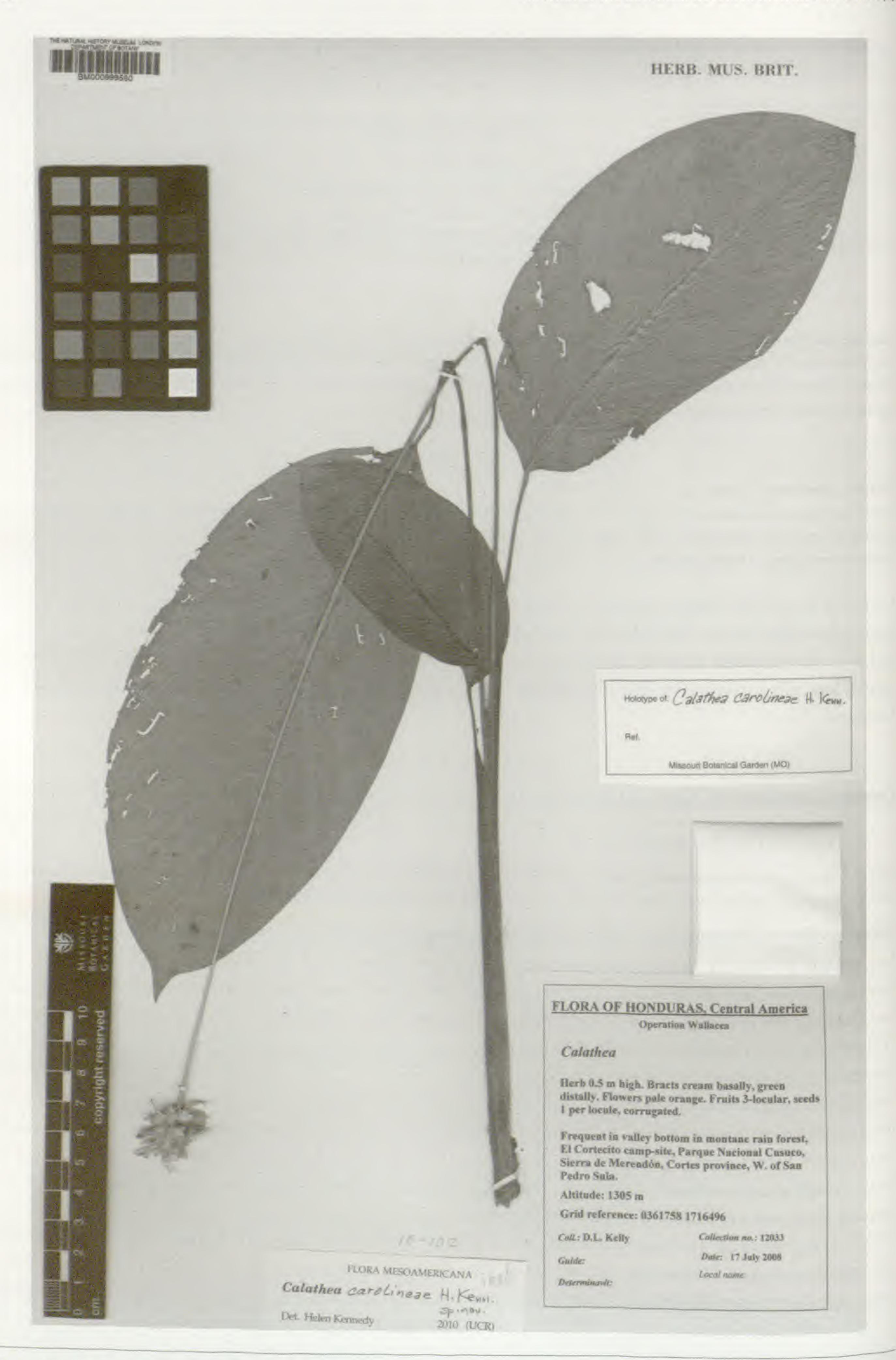


Fig. 1. Calathea carolineae H. Kenn. Holotype (Kelly 12033, BM). Photo provided by Missouri Botanical Garden

pilose, hairs 0.2-0.3 mm, less densely so centrally near base; adaxial surface sparsely minutely pilose apically; bicarinate prophyll $0.7-0.9 \times 0.45-0.6$ cm, ca. 0.35 cm wide, carina to carina, membranaceous, elliptic, apex obtuse, translucent cream-colored, glabrous; secondary bract ca. 0.75×0.4 cm, membranaceous, elliptic, apex obtuse, glabrous. **Flowers** pale orange (fide *Kelly 12033*). **Sepals** ca. $10-11 \times 3$ mm, membranous, narrowly elliptic, acute, glabrous. **Corolla** tube glabrous; corolla lobes ca. 7×3 mm, subequal, elliptic, apex obtuse, margins inrolled, appearing acute, light orange, glabrous. **Ovary** ca. 1.5×1.5 mm, smooth, glabrous. **Capsule** obpyramidal, glabrous, crowned by a persistent calyx.

Additional specimens examined: HONDURAS. Cortés: W of San Pedro Sula, Sierra de Omoa, Parque Nacional Cusuco, near river at El Cortecito Camp, primary forest, UTM 0361 1716, 14 Jul 2006, R. Fritch 14 (BM).

Distribution.—Calathea carolineae is known from two collections near El Cortecito Camp in Parque Nacional Cusuco.

Discussion.—Calathea carolineae belongs to Calathea section Breviscapus. It is most closely related to C. atropurpurea Matuda and C. matudae H. Kenn. but is readily distinguished from those in lacking claviculate bracteoles. It is further distinguished from C. matudae by the glabrous vs. tomentose abaxial leaf surface. In dried specimens, the bract tips usually retain their green color, a feature shared with C. atropurpurea. However, in C. atropurpurea the bract margin is distinctly recurved vs. not recurved and has 23–30 vs. 15–19 cross veinlets per 5 mm. All three species share the deciduous habit and presence of hairs on the upper surface of the leaf. Small individuals of C. carolineae might be mistaken for an especially large, robust individual of C. micans. However, C. carolineae is clearly distinguished from C. micans by the minutely pilose vs. glabrous adaxial leaf blade (excluding midrib), the glabrous vs. pilose and generally longer, > 40 cm vs. < 32 cm peduncle.

Etymology.—The specific epithet, carolineae, is in honor of Caroline Whitefoord (BM) in gratitude for her help at the BM herbarium during my visits over the past 40 years, her many valuable collections of Marantaceae for Flora Mesoamericana and moreover for showing me this important Honduran material.

ACKNOWLEDGMENT5

I am grateful to Caroline Whitefoord for making the recently collected Honduran specimens available for me to study at BM. I thank the curators of BM and MO for arranging the loan of this material to MO. The Missouri Botanical Garden provided support for my accommodations while working in the MO herbarium (organized, thanks to Olga Martha Montiel). The travel expenses for the trips to BM and MO were provided by Fred Ganders. Thanks to Roy Gereau (MO) for the Latin diagnosis, to Zoila Avila for digital photos of the isotype at HEH and to Cyril Nelson and George Pilz for their reviews and critical corrections. The holotype scan was provided by the Missouri Botanical Garden. I greatly appreciate the nomenclatural input of Kanchi Gandhi (GH).

REFERENCES

Kennedy, H. and F.R. Ganders. 2011. Calathea matudae and C. sousandradeana, new species of Marantaceae from México and northern Central America. Novon 21:58–65.